Sequence Listing

<110> Botstein, David

Desnoyers,Luc

Ferrara, Napoleone

Fong, Sherman

Gao, Wei-Qiang

Goddard, Audrey

Gurney, Austin L.

Pan, James

Roy, Margaret Ann

Stewart, Timothy A.

Tumas, Daniel

Watanabe, Colin K.

Wood, William I.

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Phe Ala Ile Ala Arg Arg Leu Ala Gln Asp Gly Ala His Val Val
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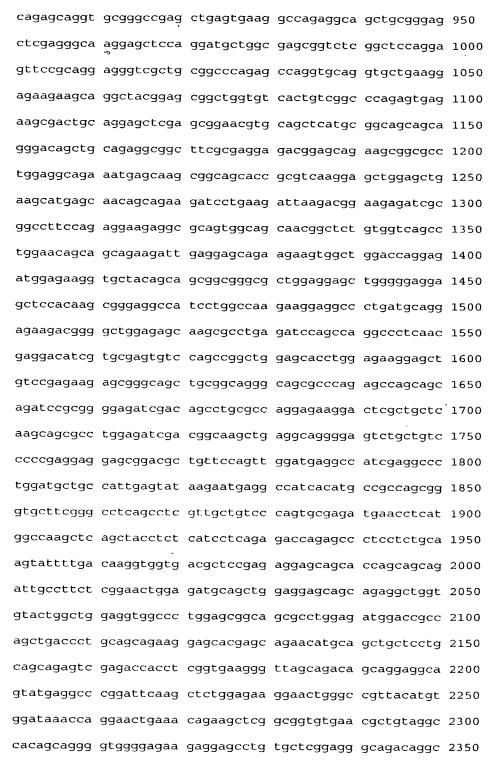
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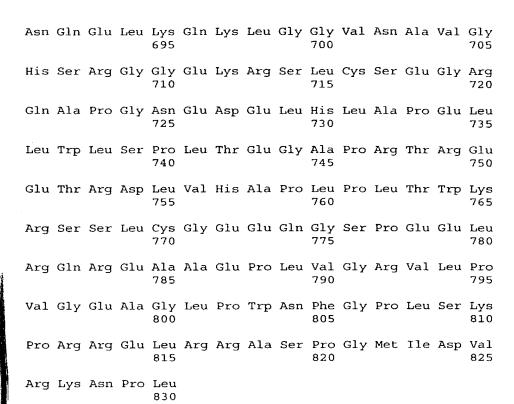
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Pro	Pro	Ala	Thr	Ala 185	Ser	Glu	Trp	Arg	Leu 190	Ala	Gln	Ala	Gln	Gln 195
Lys	Ile	Arg	Glu	Leu 200	Ala	Ile	Asn	Ile	Arg 205	Met	Lys	Glu	Glu	Leu 210
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Arg	Lys	Arg	Arg	Ser 380	Gly	Ser	Asn	Gly	Ser 385	Val	Val	Ser	Leu	Glu 390
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Lys Ile Tyr Asn Pro Ser Glu Gln Cys Cys Tyr Asp Asp Ala Ile 50 55 60

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Trp Pro Cys Phe Glu Leu Cys Cys Pro Glu Ser Phe Gly Pro Gln
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Glu Lys Arg Glu His Ala Thr Arg Asp Gly Pro Gly Arg Val Asn
50 55 60

Glu Leu Gly Arg Pro Ala Arg Asp Glu Gly Gly Ser Gly Arg Asp
65 70 75

Trp Lys Ser Lys Ser Gly Arg Gly Leu Ala Gly Arg Glu Pro Trp 80 85 90

Ser Lys Leu Lys Gln Ala Trp Val Ser Gln Gly Gly Ala Lys 95 100 105

Ala Gly Asp Leu Gln Val Arg Pro Arg Gly Asp Thr Pro Gln Ala 110 115 120

Glu Ala Leu Ala Ala Ala Gln Asp Ala Ile Gly Pro Glu Leu 125 130 135

Ala Pro Thr Pro Glu Pro Pro Glu Glu Tyr Val Tyr Pro Asp Tyr
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Arg Gly Lys Gly Cys Val Asp Glu Ser Gly Phe Val Tyr Ala Ile 155 160 165

Gly Glu Lys Phe Ala Pro Gly Pro Ser Ala Cys Pro Cys Leu Cys

Thr Glu Glu Gly Pro Leu Cys Ala Gln Pro Glu Cys Pro Arg Leu 185 190 195

His Pro Arg Cys Ile His Val Asp Thr Ser Gln Cys Cys Pro Gln 200 205 210

Cys Lys Glu Arg Lys Asn Tyr Cys Glu Phe Arg Gly Lys Thr Tyr

Gln Thr Leu Glu Glu Phe Val Val Ser Pro Cys Glu Arg Cys Arg

235 230 240 Cys Glu Ala Asn Gly Glu Val Leu Cys Thr Val Ser Ala Cys Pro Gln Thr Glu Cys Val Asp Pro Val Tyr Glu Pro Asp Gln Cys Cys 260 265 Pro Ile Cys Lys Asn Gly Pro Asn Cys Phe Ala Glu Thr Ala Val Ile Pro Ala Gly Arg Glu Val Lys Thr Asp Glu Cys Thr Ile Cys 290 His Cys Thr Tyr Glu Glu Gly Thr Trp Arg Ile Glu Arg Gln Ala 310 305 Met Cys Thr Arg His Glu Cys Arg Gln Met 320 <210> 12 <211> 24 <212> DNA <213> Artificial Sequence <220> <223> Synthetic Oligonucleotide Probe <400> 12 gaggtgtcgc tgtgaagcca acgg 24 <210> 13 <211> 24 <212> DNA <213> Artificial Sequence <220> <223> Synthetic Oligonucleotide Probe <400> 13 cgctcgattc tccatgtgcc ttcc 24 <210> 14 <211> 45 <212> DNA <213> Artificial Sequence <223> Synthetic Oligonucleotide Probe <400> 14 gacggagtgt gtggaccetg tgtacgagec tgatcagtgc tgtcc 45 <210> 15 <211> 1587

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Leu Ile Glu Ser Gly Pro Gln Val Ser Leu Val Leu Ser Lys Gly
65 70 75

Cys Thr Glu Ala Lys Asp Gln Glu Pro Arg Val Thr Glu His Arg 80 85 90

Met Gly Pro Gly Leu Ser Leu Ile Ser Tyr Thr Phe Val Cys Arg 95 100 105

Gln Glu Asp Phe Cys Asn Asn Leu Val Asn Ser Leu Pro Leu Trp
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Ala Pro Gln Pro Pro Ala Asp Pro Gly Ser Leu Arg Cys Pro Val 125 130 135

Cys Leu Ser Met Glu Gly Cys Leu Glu Gly Thr Thr Glu Glu Ile 140 145 150

Cys Pro Lys Gly Thr Thr His Cys Tyr Asp Gly Leu Leu Arg Leu 155 160 165

Arg Gly Gly Gly Ile Phe Ser Asn Leu Arg Val Gln Gly Cys Met

Pro Gln Pro Gly Cys Asn Leu Leu Asn Gly Thr Gln Glu Ile Gly
185 190 195

Pro Val Gly Met Thr Glu Asn Cys Asn Arg Lys Asp Phe Leu Thr 200 205 210

Cys His Arg Gly Thr Thr Ile Met Thr His Gly Asn Leu Ala Gln 215 220 225

Glu Pro Thr Asp Trp Thr Thr Ser Asn Thr Glu Met Cys Glu Val

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Pro	Leu	Gly	Thr	Cys 335	Ser	Ser	Gly	Ser	Pro 340	Arg	Met	Thr	Cys	Pro 345
Arg	Gly	Ala	Thr	His 350	Сув	Tyr	Asp	Gly	Tyr 355	Ile	His	Leu	Ser	Gly 360
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Pro	Ser	Ser	Phe	Leu 380	Leu	Asn	His	Thr	Arg 385	Gln	Ile	Gly	Ile	Phe 390
Ser	Ala	Arg	Glu	Lys 395	Arg	Asp	Val	Gln	Pro 400	Pro	Ala	Ser	Gln	His 405
Glu	Gly	Gly	Gly	Ala 410	Glu	Gly	Leu	Glu	Ser 415	Leu	Thr	Trp	Gly	Val 420
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<400> 17

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Tyr Phe Gly Thr Lys Thr Arg Tyr Glu Asp Val Asn Pro Val Leu
50 55 60

Leu Ser Gly Pro Glu Ala Pro Trp Arg Asp Pro Glu Leu Leu Glu
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Gly Thr Cys Thr Pro Val Gln Leu Val Ala Leu Ile Arg His Gly 80 85 90

Thr Arg Tyr Pro Thr Val Lys Gln Ile Arg Lys Leu Arg Gln Leu 95 100 105

His Gly Leu Leu Gln Ala Arg Gly Ser Arg Asp Gly Gly Ala Ser

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Arg	Gln	Asp	Met	Arg 155	Gln	Leu	Ala	Leu	Arg 160	Leu	Ala	Ser	Leu	Phe 165
Pro	Ala	Leu	Phe	Ser 170	Arg	Glu	Asn	Tyr	Gly 175	Arg	Leu	Arg	Leu	Ile 180
Thr	Ser	Ser	Lys	His 185	Arg	Cys	Met	Asp	Ser 190	Ser	Ala	Ala	Phe	Leu 195
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Val	Ala	Asp	Met	Glu 215	Phe	Gly	Pro	Pro	Thr 220	Val	Asn	Asp	Lys	Leu 225
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Pro	Glu	Met	Gln	Asn 260	Ile	Leu	Lys	Lys	Val 265	Ala	Ala	Thr	Leu	Gln 270
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His	Leu	Asp	Lys	Ala 350	Val	Glu	Gln	Lys	Gln 355	Arg	Ser	Gln	Pro	Ile 360
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Pro	Leu	Leu	Ser	Leu 380	Met	Gly	Tyr	Phe	Lys 385	Asp	Lys	Glu	Pro	Leu 390
Thr	Ala	Tyr	Asn	Tyr 395	Lys	Lys	Gln	Met	His 400	Arg	Lys	Phe	Arg	Ser 405

Gly Leu Ile Val Pro Tyr Ala Ser Asn Leu Ile Phe Val Leu Tyr 420

His Cys Glử Asn Ala Lys Thr Pro Lys Glu Gln Phe Arg Val Gln 435

Met Leu Leu Asn Glu Lys Val Leu Pro Leu Ala Tyr Ser Gln Glu 450

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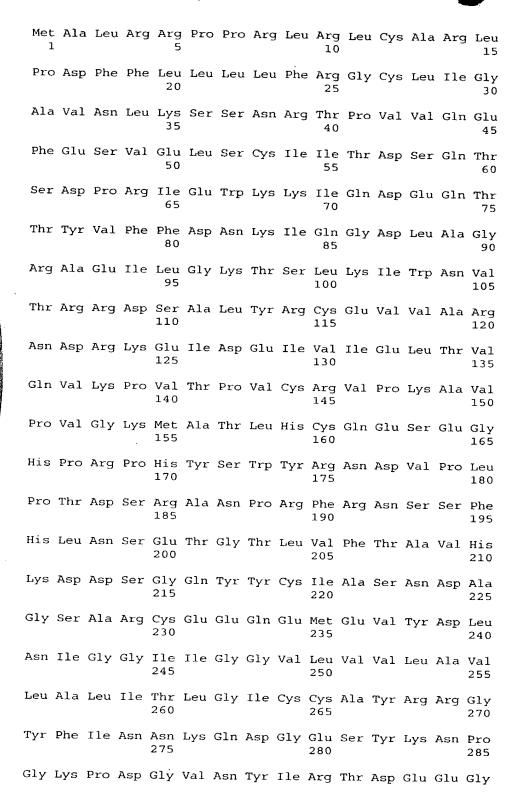
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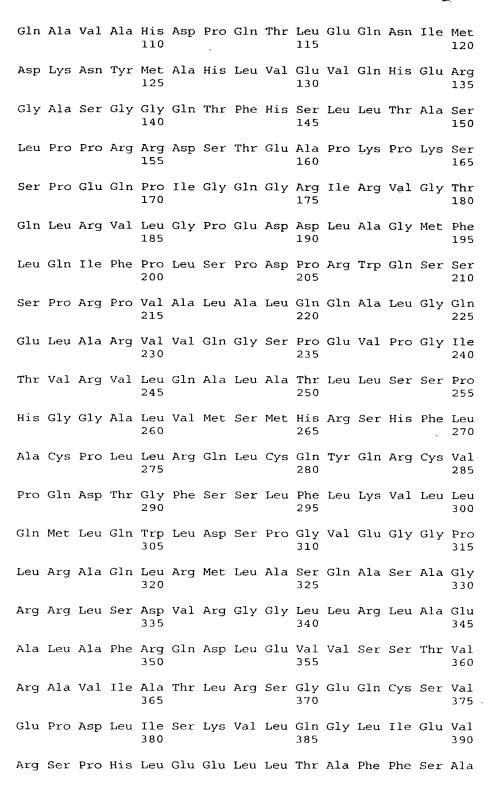
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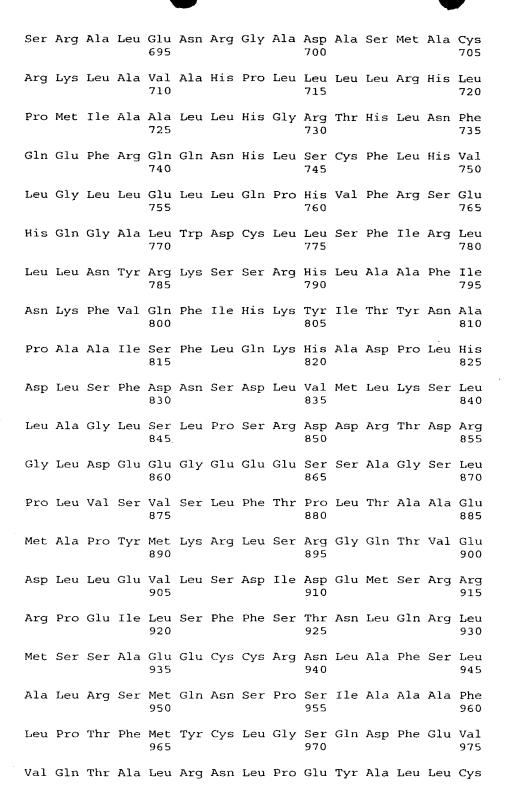
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Gly	Pro	Ser	Ser	Gly 455	Leu	Leu	Val	Asp	Trp 460	Leu	Glu	Met	Leu	Asp 465
Pro	Glu	Val	Val	Ser 470	Ser	Суѕ	Pro	Asp	Leu 475	Gln	Leu	Arg	Leu	Leu 480
Phe	Ser	Arg	Arg	Lys 485	Gly	Lys	Gly	Gln	Ala 490	Gln	Val	Pro	Ser	Phe 495
Arg	Pro	Tyr	Leu	Leu 500	Thr	Leu	Phe	Thr	His 505	Gln	Ser	Ser	Trp	Pro 510
Thr	Leu	His	Gln	Cys 515	Ile	Arg	Val	Leu	Leu 520	Gly	Lys	Ser	Arg	Glu 525
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Gln	Lys	Arg	Arg	Glu 560	Glu	Leu	Val	Leu	Arg 565	Val	Gln	Gly	Pro	Glu 570
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Tyr	Leu	Gln	Arg	Pro 650	Glu	Leu	Arg	Val	Pro 655	Val	Pro	Glu	Val	Leu 660
Leu	His	Ser	Glu	Gly 665	Ala	Ala	Ser	Ser	Ser 670	Val	Cys	Lys	Leu	Asp 675
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980 985 990

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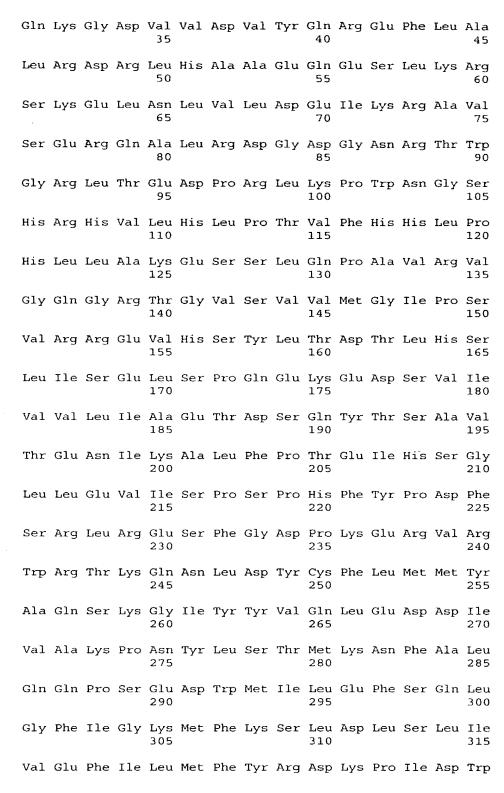
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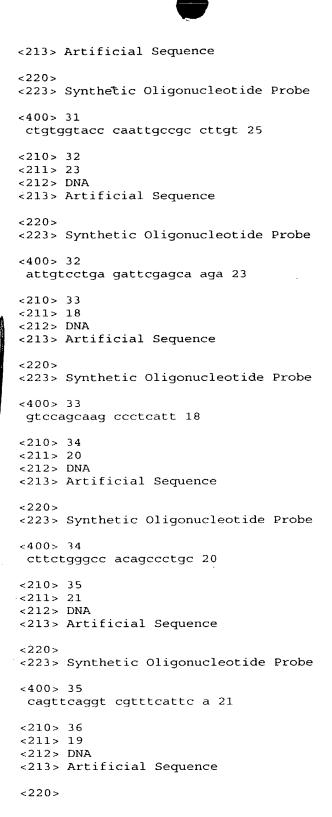
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